

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
13 October 2005 (13.10.2005)

PCT

(10) International Publication Number
WO 2005/095252 A1

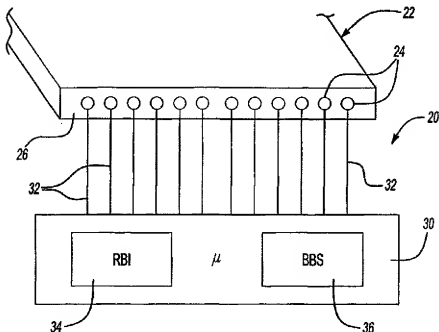
- (51) International Patent Classification⁷: B66B 9/00, G01N 27/82
- (21) International Application Number: PCT/US2004/007899
- (22) International Filing Date: 16 March 2004 (16.03.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (71) Applicant (for all designated States except US): OTIS ELEVATOR COMPANY [US/US]; Ten Farm Springs Road, Farmington, CT 06032 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): STUCKY, Paul A. [US/US]; 1038 Melbourne Avenue, Stockton, California 95203 (US). VERONESI, William A. [US/US]; 342 Fairfield Ave., Hartford, Connecticut 06114 (US).
- (74) Agent: GASKEY, David J.; CARLSON, GASKEY & OLDS, 400 W. Maple Rd., Suite 350, Birmingham, MI 48009 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

— of inventorship (Rule 4.17(iv)) for US only

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(54) Title: ELEVATOR LOAD BEARING MEMBER WEAR AND FAILURE DETECTION



(57) Abstract: An elevator load bearing member (22) monitoring device (20) has a controller (30) that applies a first signal (40) and a second signal (50) to at least one tension member (24) in the belt. The first signal (40) in one example has a plurality of pulses (42) of a selected amplitude and duration. The second signal (50) includes a series of pulses (52) having a second, shorter duration and lower amplitude. The first signal is useful for providing information regarding a wear condition of the load bearing member. The controller utilizes a response to the second signal to determine a failure condition such as a broken load bearing member.

**Published:**

— with international search report

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